

TJ
Contd.

the negative electrode comprises ceramic particles not relating to the charge and discharge reactions of the battery;

the negative electrode comprises 5 to 20 parts by weight of the ceramic particles in 100 parts by weight of the active substance;

the particle size of the ceramic particles is 1 micron or less; and

the gel polymer electrolyte does not comprise ceramic particles.

22. (As Amended) A non-aqueous lithium ion secondary battery comprising:

TJ
Sub (D)

a positive electrode comprising a lithium transition metal compound oxide;

a negative electrode which is negative during discharging of the battery, the negative electrode comprising an active substance that occludes and releases lithium ions;

a microporous polymer film separator between the positive electrode and the negative electrode; and

a nonaqueous electrolyte solution dissolving a lithium salt;

wherein:

the negative electrode comprises ceramic particles not relating to the charge and discharge reactions of the battery;

the negative electrode comprises 5 to 20 parts by weight of the ceramic particles in 100 parts by weight of the active substance; and

the particle size of the ceramic particles is 1 micron or less.